

THE SURGEON'S

Circular Letter

VOLUME • VI

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1 MARCH 1951



A FAR EAST
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OF ARMY
MEDICAL SERVICES
INFORMATION

MEDICAL SECTION • GHQ • FAR EAST COMMAND
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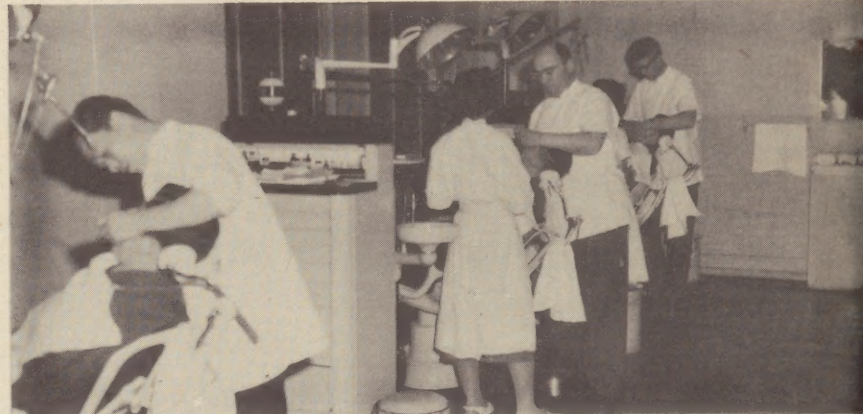
Dental clinic of the 25th Division, temporarily installed in an abandoned building near the front lines, Masan, Korea



Oral surgery performed on fractured mandible of combat veteran, Tokyo Army Hosp.



Dental clinic at clearing station, 25th Division, Chochiwan, Korea.



Army dentists and technicians at work in main treatment room of the Tokyo General Dispensary Dental Clinic, Finance Bldg Branch



Oral Hygiene - Prosthetic Section, Tokyo General Disp.



Dental treatment at a field installation, Korea

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General Headquarters
Far East Command
Medical Section
APO 500

ADMINISTRATIVE

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1. ARMY DENTAL CORPS CELEBRATES 40TH ANNIVERSARY



March 3, 1951 marks the 40th anniversary of the Army Dental Corps. An act of Congress on 3 March 1911 formally established the Corps as part of the Army's Medical Service.

Ten years prior to that time, Congress had authorized the appointment of 30 contract dental surgeons in a bill that represented the culmination of efforts to secure dentists for the U. S. Army. Precedent had been established even before that date, for in 1864 the Congress of the Confederate States had passed a law for the conscription of dentists to serve in the Confederate Army.

The 30 original contract dentists held no rank until 1911 when the establishment of the Dental Corps created for them the grade of first lieutenant. Shortly after the start of World War I, officers of the Corps were granted all rights and privileges as well as commensurate rank with that of the Medical Corps.

The strength of the Corps has fluctuated with the size of the Army. When the war between the United States and Germany began in 1917, there were only 86 dental officers on active duty. By the time the armistice had been signed, there were on duty 4,510 dental officers. Less than 500 were on active duty in January 1940, but during World War II when peak strength had been reached, there were 15,292 officers in the Corps.

The Dental Corps' research and development program was officially recognized and organized in 1946 when the first dental officer was assigned to the Medical Research and Development Board of The Surgeon General's Office. The increased importance of research in this field was reflected in the formation of the Dental Research and Advisory Committee in May 1949.

A program of dental research being conducted by the Army at present is coordinated between the Army Medical Center, the Armed Forces Institute of Pathology, the National Bureau of Standards and civilian institutions under contract. Following are some of the more important projects now under way:

1. Studies being conducted at the Army Medical Center, University of Indiana and the University of California on the chemical and bacteriological aspects of tooth decay.
2. Studies on periodontal disease being conducted at the Armed Forces Institute of Pathology and Beth Israel Hospital, Boston.
3. Studies on infectious oral diseases being conducted at the University of Illinois.
4. Studies on debilitating oral lesions being conducted at the Armed Forces Institute of Pathology and Beth Israel Hospital, Boston.
5. Cephalometric studies of dental tissues being made at the Army Medical Center.

The development of field equipment has shown rapid progress in recent years. Facilities for performing dental work with mobile tactical units in a combat area, for example, have been developed to the point at which, with the contents of three field dental chests, an officer can put in fillings, make dentures and perform oral surgery. Nothing that he would be called upon to do in civilian practice is impossible. This equipment permits dental casualties to be treated adequately within a division area.

Major General Walter D. Love, Chief, Dental Division, Office of The Surgeon General, made the following statement on the occasion of the 40th anniversary:

"It is with sincere appreciation that I join members of the Corps, both active and retired, in expressing our gratitude to those fellow dentists who today, as in the past, are giving so much at a time when their services are so acutely needed. Their unselfish contribution of service presages an even brighter future for the Army Dental Corps."

During the years benefits and improvements have contributed to the growth and development of the Corps from its modest beginning to the stature which it enjoys today. The present scope of activities of the Army include internship, residency, professional education and career management programs, and offers opportunities for advancement, travel, and security hardly envisioned by the small group which comprised membership of the Dental Corps when it was created 40 years ago.

II. SWEDISH RED CROSS HOSPITAL REPLACEMENTS ON DUTY

The first replacements for the Swedish Red Cross Hospital in Korea have arrived and are now on duty with their unit in Pusan. Major Suante Fisher, a regular Swedish Army officer from Stockholm, is officer in charge of the group, all of whom were chosen from among 500 volunteers who requested Korean service. Forty-three persons make up the new replacement group, including one nurse and one enlisted woman.

The personnel who have finished their tours of duty were returned almost immediately to Sweden by air, pausing only for a few days of sight-seeing in Tokyo.

Major General Edgar Erskine Hume, Chief Surgeon, FEC, presented Bronze Star Medals to Maj. Kurt Hakansson, Liaison Officer, and Maj. Stig Ljunggren, Fiscal Officer, for distinguished service with the Swedish Red Cross Hospital. Maj. Hakansson's decoration was the first American award presented to a Swedish Officer serving as a member of the UN Command.

III. THE MANAGEMENT OF A FIXED HOSPITAL

Lt. Colonel Floyd C. Plowman, MSC, 3d Station Hospital and Capt. Lewis Huggins, MSC, Office of the Surgeon, EUSAK

An innovation which has been underway for several years in the Army Medical Service may have far-reaching effects on the careers of all medical personnel, on the Army Medical Service's splendid record of efficiency, and on our military economy.

For years one has heard the statement: "You can't run the Army like a civilian business." That is true, but businesslike methods can be introduced into the Army. Our large hospitals, Valley Forge, Brooke, Tokyo Army, Osaka Army, for example, parallel huge civilian firms

in the expenditure of supplies and funds and in the use of personnel. Every Army hospital spends thousands of dollars annually; therein lies a golden opportunity for the Army Medical Service to develop and establish sound modern business practices in its hospitals.

To the average officer in the Army Medical Service the term "Management Officer" is unfamiliar or conveys an erroneous impression. The title is not synonymous with the former "Control Officer", neither does it connote Inspector General functions. The most nearly exact description is that term found in civilian life: "Business Manager". The Management Officer issues no orders. His office is a fact-finding, planning and recommending service element responsible for the provision of common services.

In order to better understand the nature of the Management Office a limited amount of Army Medical history must be reviewed. Personnel assigned to the Surgeon General's Office and to field installations have long been interested in modernizing Army hospital administration. This group has been strongly backed by the Surgeon General, the Secretary of Defense and others in the highest echelons of our government. Their goal has been to increase efficiency, save public funds and effect personnel economy. After a period of thorough research, analysis and planning, a pilot hospital reorganization program was set up in Valley Forge Army Hospital in the fall of 1949 by the Surgeon General. One of the important factors in the success of this venture was the Management Office.

In developing the Valley Forge program the most highly skilled management engineers from civilian corporations and government departments were consulted. Such outstanding firms as Ford Motor Company and S.K.F. sent their top management experts to help. Outstanding executives from all departments of the government were asked for aid and advice. No quick-dying crusade was envisioned--rather, a sound economical departure, a new concept of hospital organization and administration. The most successful ideas of hospital commandants developed through the years were incorporated and all the sound structures of the old organization were retained. In this program the Management Officer was to be a key individual.

The Management Officer, a senior MSC officer, is primarily interested in the effective utilization of money, manpower, materiel and facilities in the accomplishment of the hospital mission. He serves as a consultant to the commanding officer and other department heads in questions of manpower utilization, space allocations, work simplification procedures, and expenditure of appropriated funds. Included in the functions of his office are the evaluation, analysis, interpretation, and presentation of statistical data and reports representing the operation of the hospital. Reports control, simplification and standardization, and mobilization planning are also the responsibilities of this office.

The Management Office is composed of three branches: Fiscal, Manpower Analysis and Administrative Methods. Each Branch is headed by a company grade MSC officer.

The officer in charge of the Fiscal Branch is charged with the duties of advising the commanding officer on all fiscal matters, determination of fund requirements, compilation of budget estimates, securing required funds and administration of the approved budget. He maintains proper fiscal and accounting records. Audit functions within the hospital are his responsibility. He also develops and establishes cost standards.

The officer in charge of the Manpower Analysis Branch conducts continuous study of manpower requirements and the effectiveness of manpower utilization throughout the hospital. He must be cognizant of the effect that improved procedures, work simplification and standardization have on manpower requirements. This officer is interested only in personnel "spaces" or "slots"; he does not assign personnel. He recommends changes in allocation of personnel "spaces" as necessary to maintain an equitable distribution of manpower based on increased or decreased workload in any activity. Furthermore, he maintains current manning requirements (tables of distribution) for all duty personnel. The hospital commander is the approving authority for all personnel allocations.

The officer in charge of the Administrative Methods Branch conducts continuous studies of the detailed organization of the hospital. In so doing he analyzes work methods and administrative procedures with a view to effecting the simplification and standardization thereof. He determines the essentiality of all local forms, recommending revision, simplification, consolidation or elimination. The essentiality of all internal recurring reports are determined by him. He recommends the establishment of new procedures which increase the effectiveness of the employee. The need for modern business machines which have feasible application in hospital accounting and record-keeping are studied by this officer.

In the pilot test, the use of the Management Officer in Army Hospitals proved sound, highly desirable -- and possibly long overdue.



IV. AWARDS TO ARMY MEDICAL SERVICE PERSONNEL

The following additional Army Medical Service personnel have been awarded the Air Medal, Silver and Bronze Star Medals for exceptional bravery in face of the enemy and meritorious service in the Korean situation.

Adamitis, John J., Sgt, BSM
 Adams, James J., Lt Col, MSC, BSM
 Adams, Walter E., Pfc, BSM
 Agee, Clarence R., Pfc, BSM
 Ahsenmacher, Henry, Cpl, BSM
 Alalem, Pastor, BSM
 Alderman, Clifton J., Sgt, BSM
 Allen, August T., Cpl, BSM
 Allen, Walter H., M/Sgt, BSM
 Alloway, James L., Sgt, BSM
 Allunis, Francis, Cpl, BSM
 Alphin, William T., Pfc, BSM
 Alred, Harold E., Pfc, BSM
 Alston, Robert L., Cpl, BSM
 Anderson, John C., Cpl, BSM
 Andrews, Paul K., Cpl, BSM
 Andrews, William S., 1st Lt, MSC, BSM
 Anthoine, Paul J., Cpl, BSM
 Arcand, Eugene J., Pfc, BSM
 Aronhalt, Donald, Pfc, BSM
 Asher, Billy J., Pfc, BSM
 Attikiousel, Michael, Pfc, BSM
 Auguston, John L., Cpl, BSMV
 Bacon, Robert C., Pfc, BSM
 Baldwin, William B., Pfc, BSM
 Banker, Glenn E., Cpl, BSM
 Barbour Charles G., Pfc, BSM
 Barnett, Lucy C., Sgt, BSM
 Barr, James W., Sgt, BSM, SS
 Barth, Lee D., Lt Col, MC, BSM
 Barth, Tucker A., Capt, MC, SS
 Basler, Albert H., Sgt 1/c, BSM
 Batchelor, Frank L., Sgt, BSMV
 Bazemore, Juddie R., Sgt, BSM
 Bear, James T., Cpl, SS
 Bell, Wilfred B., Capt, DC, BSM
 Bernardo, Frank J., Sgt, BSM
 Bielew, Charles V., Pfc, BSM
 Bigelow, Daniel T., Pfc, BSM
 Birmingham, Calvin, 1st Lt, MSC, BSM
 Black, Charlie L., Cpl, BSM
 Black, Harry E., Pfc, BSM
 Black, William A., Pvt, BSM
 Blacklock, Walter M., Pvt, BSMV
 Blanchard, Richard, Sgt, SS
 Boe, Arlie D., Sgt, BSMV
 Bogert, Martin, Jr., Cpl, BSM
 Bohenkamp, Marvin, 1st Lt, DC, BSM
 Bohman, Gunnar E., Maj, MC, BSM
 Bolner, Dale R., Cpl, BSM
 Boody, Vincent G., Cpl, BSM
 Boothe, Roland E., Cpl, BSM
 Bottazzo, Thomas, Pfc, BSM
 Bourne, Freeman R., Sgt, BSM
 Boutote, Claude, Cpl, BSM
 Bowman, Lewis C., Sgt, BSM
 Bradford, Elijah, Cpl, BSM
 Bradley, Francis E., Sgt 1/c, BSM
 Brady, James E., Cpl, BSM
 Bragg, Leroy J., Pfc, BSM
 Breecher, Samuel L., Cpl, BSM
 Brennan, Thomas J., Sgt 1/c, BSM
 Brill, Andrew J., Pfc, BSMV
 Brister, Bobbie R., Pfc, BSM
 Brockbank, Fred M., Cpl, SS
 Bronder, Conrad J., Cpl, CR
 Brooks, Erskine J., Pvt, BSMV
 Brown, Eugene B., Pfc, BSM
 Brown, Marvin J., Sgt, BSM
 Brubaker, Luther, 1st Lt, MC, BSM
 Brune, Warren H., Capt, MC, SS
 Ruehrig, Robert C., Lt Col, MSC, BSM
 Buntin, Sidney L., Cpl, BSM
 Burleson, Joe M., Cpl, BSM
 Burnett, Thomas, Capt, MC, BSM
 Burns, Ernest A., Cpl, BSM
 Busby, Elmer K., M/Sgt, BSM
 Butler, William W., Sgt, BSM
 Buynoski, Stanley J., Sgt, BSM
 Callison, John M., Sgt, BSM
 Camoesas, Alfonso, Cpl, SS
 Campbell, Charles H., Pvt, BSM
 Campbell, Glen R., Pfc, BSM
 Campbell, John H., Cpl, BSMV
 Cans, Harry L., Maj, MC, BSM
 Cap, Thaddeus W., Maj, MSC, BSM
 Carius, Marvin W., Maj, DC, BSM
 Carnahan, Vernon A., Cpl, BSM
 Carreon, Wenceslao, Cpl, CR
 Carson, Eugene L., Lt Col, MSC, BSMV
 Cassidy, Howard L., Sgt, BSM
 Cates, Curtiss C., Pfc, BSMV
 Chadwick, Richard E., Cpl, BSMV
 Chastain, Willis L., Maj, MSC, BSM
 Chichester, Brent, Cpl, BSM, SS
 Childs, Ralph E., M/Sgt, BSM
 Christ, Charles A., Sgt, BSM
 Christensen, John S., Sgt 1/c, CR
 Cilley, James R., Cpl, SS
 Clanton, James L., Cpl, BSM
 Clark, Roland, Cpl, BSM
 Clarkson, John, Capt, DC, BSM
 Cline, Paul R., Pfc, BSM
 Clintman, Charles, Sgt, BSM
 Coble, Frank L., Cpl, BSM
 Coleman, Arlo K., Cpl, BSM
 Comeau, Henry J., Cpl, BSM
 Conkling, Charles H., Pfc, BSM
 Conner, William L., Pfc, BSM
 Conrad, Ocie, Pfc, BSMV
 Conteras, Fred, Sgt, BSM
 Cooper, David R., Cpl, BSM
 Cox, Dorsey D., Sgt, BSM
 Creech, Walter M., Sgt, BSM
 Crosby, Leonard A., Maj, MSC, BSM
 Crasnowski, Leonard, Cpl, BSM
 Curran, Byron, Pfc, BSM
 Curran, Kenneth F., Sgt 1/c, BSM
 Cuttillo, Emanuel F., Pfc, SS
 Daniels, Bradley H., Pfc, SS
 Daugherty, Forest W., Cpl, BSM
 David, Joseph W., Pfc, BSMV
 Davis, William C., Sgt, BSM
 Davis, Woodrow W., Cpl, BSM
 De Berry, Kenneth E., Cpl, BSM
 De Haven, Paul C., Sgt, BSM
 De Witt, James D., Cpl, BSM
 Deabler, Harold H., Capt, MC, BSM
 Deason, Jesse C., Jr., Sgt, BSM
 Delahunt, John C., Capt, MSC, BSM
 Devan, William T., Lt Col, MC, BSM
 Dewey, Charles E., Sgt, BSM
 Distefano, Bernard, Pfc, BSM
 Donaho, Russell D., Cpl, BSM
 Dooley, Le Ray D., Pfc, BSM
 Dooley, Nolan T., Cpl, BSM
 Dooley, Richard D., Pfc, BSM
 Doren, Austin, H., Maj, MC, BSM
 Dovell, Chauncey E., Col, MC, LFC, AM
 Dozier, Curtis B., Cpl, BSM
 Drake, Leo F., Cpl, BSM
 Drake, Robert A., Cpl, BSM
 Drew, Lewis V., Cpl, BSM
 Dubuisson, Harold D., Cpl, BSMV
 Dunlap, James E., Cpl, BSM
 Edwards, Ralph, Cpl, BSMV
 Eisenhard, Donald L., Pfc, BSM
 Ellis, Glenn B., Sgt 1/c, CR
 Enger, James A., Capt, MSC, BSM
 Esmard, Leroy H., Pfc, BSMV
 Ethridge, Johnie R., M/Sgt, BSM
 Eubanks, Hal D., Pfc, BSMV
 Evans, Paul J., 1st Lt, MSC, BSM
 Everett, Marsolen R., Sgt, BSMV
 Fairchild, Harold M., Sgt 1/c, BSM
 Fairchild, Leslie L., Sgt, BSM
 Fankel, Albert W., Cpl, BSM
 Fanning, Raymond F., Pfc, BSM
 Farmer, Hernan O. C., Sgt, BSM
 Farmer, John N., Sgt, BSMV
 Faulkner, Ralph I., Pfc, BSM
 Feagan, Kenneth M., Capt, MSC, BSM
 Findley, William, Cpl, BSMV
 Fitzgerald, William, Sgt 1/c, CR
 Flagg, Richard W., Cpl, BSM
 Ford, Gale W., Pfc, BSMV
 Fore, Doyce G., Sgt, BSM
 Frederickson, Donald, Cpl, BSM
 Friedrich, Donald F., Sgt, BSM
 Fugate, Herschel G., Cpl, BSM
 Gaffney, Thomas, Cpl, BSM
 Gallegos, Lazaro, Cpl, BSM, BSMV
 Gibson, Carl, Cpl, BSM, BSMV
 Gilbert, Willie C., Cpl, BSM
 Gilstrap, Robert D., Sgt, SS
 Girdano, Anthony, Pfc, BSM
 Gleason, Earl R., Pfc, BSM
 Glover, Earl P., Sgt, BSM
 Goodyear, Lee R., Sgt 1/c, BSM
 Grant, Earl, Pfc, BSM
 Greene, Walter M., Cpl, BSM
 Grismore, Walter V., Cpl, BSM
 Gritsavage, Alice M., Lt Col, ANC, IM
 Grothe, Carl D., Sgt, BSMV
 Guenzel, Harlan L., Cpl, BSMV
 Hagood, Russell M., Cpl, BSM, SS
 Haines, Robert E., Cpl, BSM
 Hale, Clifford A., Cpl, BSM
 Hall, Burne L., Cpl, BSM
 Hall, William, Capt, MSC, BSMV
 Hanson, William A., Cpl, BSMV
 Hardin, Dean G., Sgt, BSMV
 Harmath, Joseph A., Sgt, BSM
 Harris, James W., Sgt, BSM
 Hart, Bill E., Sgt, BSM
 Hebb, Harry, Sgt, BSM
 Hedgepath, Leslie E., Capt, MC, SS
 Helgeson, Delmer L., Cpl, BSM
 Herbert, Kenward P., Sgt, BSMV
 Hercov, Nathan, Sgt 1/c, BSM
 Herndon, Euclid G., Capt, MSC, BSM
 Herring, Frank E., Sgt, BSM
 Higgins, Frederick, Pfc, SS
 Hill, James M., Cpl, BSMV
 Hillard, Donald O., Cpl, BSM
 Hinton, Earnest, Sgt, BSM
 Hobson, Robert W., Capt, DC, BSM
 Hodges, Wesley, Pfc, BSM
 Hoffart, Plus, Pfc, BSM
 Hoffman, John L., Sgt 1/c, BSM
 Hudson, Eddie F., Sgt, BSM
 Huebner, George Jr., Sgt, BSM
 Hughes, Sidney R., Cpl, BSMV
 Hunt, Albert B., Lt Col, MSC, BSM
 Hurst, Emery L., Sgt, BSM
 Hurt, Andrew, 2d Lt, MSC, BSM
 Hutchinson, Robert, Cpl, BSM
 Iorio, Frank A., Sgt, BSM
 Jacobs, Isadore, Cpl, BSM
 James, Louis D., M/Sgt, BSM
 James, William H., Cpl, SS
 Jendro, Edward, Sgt, BSM
 Jennings, Hugh C., M/Sgt, CR
 Johnson, Lesley W., Sgt 1/c, BSMV
 Johnson, Lester H., Sgt, BSMV
 Johnson, Lodus N., Cpl, BSMV
 Johnson, Paul L., Pfc, SS
 Johnson, Paul, Cpl, BSM
 Jones, Dave J., Sgt, BSMV
 Jones, Howard T., Sgt, BSMV
 Justiniano, Lopez J., Cpl, SM
 Kanagasaki, George, Pfc, BSM
 Kanaki, Masaya, M/Sgt, BSM
 Kay, Clarence D., Cpl, BSMV
 Kelley, John R., Maj, MSC, BSM
 Kendrick, William R., Cpl, BSM
 Kerlin, Robert F., M/Sgt, BSM
 Kern, Wade C., Jr., Cpl, SS
 Ketcham, Harvey F., Cpl, BSMV
 Kies, Robert F., Pfc, BSM
 King, Charles J., Pfc, BSM
 Kinlen, John F., Pfc, BSMV
 Knight, Thomas F., Cpl, BSMV
 Kornfeld, Samuel, Sgt, BSM
 Kowalsky, Matthew J., Lt Col, MC, BSM
 Kreidinger, Robert, 1st Lt, MSC, BSMV
 Krepley, Louis R., Sgt, BSMV
 Kugler, Orville H., Pfc, SS
 Lemanche, Philip L., Capt, MSC, BSM
 Lane, William D., Sgt, BSM
 Lang, Erwin L., Sgt, BSM
 Latham, Robert M., Sgt, BSM
 Leighton, Jimmie, Pfc, BSMV
 Lemay, Edward F., 1st Lt, MSC, BSMV
 Lemmon, Robert D., Sgt, BSM
 Lescantz, Joseph L., Pvt, BSM
 Lisoski, Edward J., M/Sgt, BSM
 Little, Donald J., Sgt 1/c, BSM
 Long, Robert E., Cpl, BSM
 Lovella, Gerald T., Pfc, BSMV
 Loving, David, Sgt, BSM
 Lowe, Gerald H., 1st Lt, MSC, BSM
 Lowe, Junior B., Cpl, BSMV
 Lowry, Kenneth E., Pfc, BSM
 Ludbig, Jay W., Cpl, BSM
 Injan, Marcello, Pfc, BSM
 Luttrell, Thornton, Capt, BSM
 Lynam, Clarence, Cpl, BSM
 Maloney, William, Pfc, BSMV

Mandiola, Francisco, Pfc, BSMV
Mann, Lonnie, Sgt, BSM
Mansfield, Joseph M., Cpl, BSMV
Marland, Joseph R., Pfc, BSMV
Martins, John, M/Sgt, BSM
Mason, Robert S., Capt, MSC, BSM
Mathis, Charles B., 1st Lt, MSC, BSM
Matthews, Howard N., M/Sgt, BSM
Matthews, Riley G., Pfc, BSMV
Maustiller, Arthur, Pfc, BSM
Maxson, Paul A., 1st Lt, MSC, SS
Mayfield, Thomas, Sgt 1/c, BSM
Mayorga, Benito M., Cpl, BSM
McAllister, Charles, Lt Col, MSC, BSM
McBride, Charles D., Cpl, BSMV
McClain, Bill J., Pfc, BSMV
McCoy, Donald G., Cpl, BSM
McCullough, Willi, Cpl, BSM
McDonald, Jerome, Cpl, BSMV
McFarland, Clarence, Sgt, CR
McGuire, Ray P., Cpl, BSM
McKee, Elmer C., Pfc, BSM
McKie, Joseph, Cpl, BSMV
McKinney, Tony M., Sgt, BSM
McMillan, William, Cpl, SS
McRoberts, Ray W., Sgt 1/c, BSM
Neece, Eugene C., Pfc, BSMV
Melicki, Francis R., Cpl, BSM
Mihalak, John P., Sgt 1/c, BSM
Mikos, Joseph W., 2d Lt, MSC, BSM
Miller, Donald L., 1st Lt, MSC, BSM
Miller, Jerry A., Cpl, BSM
Miller, John T., Pfc, BSM
Miller, Vivian E., Sgt, CR
Minami, Harold I., Cpl, BSM
Monaghan, George T., Sgt, BSM
Moncrief, John A., Capt, MC, BSM
Montano, Edward M., Cpl, BSM
Moon, Douglas, Cpl, BSM
Moore, Garland J., Sgt 1/c, BSMV
Morgan, Edward R., M/Sgt, BSM
Morrison, Samuel S., Capt, MC, BSM
Mosher, Donald L., Pfc, BSM
Mosley, Donald W., Cpl, BSM
Moya, Antonio R., Pfc, BSM
Murphy, Billy F., Pfc, BSMV
Murphy, Dean R., Cpl, BSMV
Murphy, George R., Pfc, BSMV
Murphy, Robert D., Cpl, BSMV
Nakagawara, Yoshio, 1st Lt, MSC, BSM
Napier, Roy, Sgt 1/c, BSM
Neiman, Watson E., Lt Col, MC, IM
Nielsen, Willard A., Cpl, BSM
Nowell, John N. III, Capt, MSC, BSM
Nulty, John C., M/Sgt, BSM
Nulty, William E., 1st Lt, MC, BSM
Nunley, William C., Sgt, BSMV
O'Leary, Patrick E., Cpl, BSM
Osme, Otto, Cpl, BSMV
Orsontree, Leo F., Cpl, BSM
Ortiz, Guadalupe, Cpl, SS
Owings, Albert C., Cpl, BSM
Padilla, Felix, Sgt, BSMV
Parker, Arlie, Cpl, BSMV
Pearson, Billie, Pfc, SS
Pence, Clarence L., Pfc, BSM
Perlow, David, Lt Col, MSC, BSM
Petrini, Bruno A., Capt, MC, BSM
Phillips, Clarence, Pfc, BSM
Phillips, Riley J., Sgt, BSMV
Phillips, Robert L., Sgt 1/c, BSM
Podsiadly, Edward, Maj, MSC, BSM
Pocicillo, Frank J., Cpl, BSM
Pratt, Parker H., Capt, MSC, BSM

Price, Paul, Pfc, BSM
Propst, Edward R., Sgt, BSM
Puffum, Donald E., Sgt, BSM
Purris, Martin M., Pfc, BSM
Rawlings, James E., Sgt, BSMV
Ray, David, Pfc, BSMV
Reed, James A., Cpl, BSM
Reilly, Thomas J., Capt, MSC, BSM
Reston, Stanley, Pfc, BSM
Richton, Reynold H., Maj, MSC, SS
Rieb, Fred, Sgt 1/c, BSM
Roberts, William C., Cpl, BSMV
Robertson, Harry C., Capt, DC, BSM
Robinson, Dennis M., Pfc, BSMV
Rodriguez, Joseph, Pfc, BSM
Rodstrom, Donald E., Cpl, DSC
Roe, Clifford G., Sgt, BSM
Rogers, Robert, Capt, MC, BSM
Rondeau, Albert P., Cpl, BSM
Rosenbalm, Marilyn R., Cpl, BSM
Ross, John W., Pfc, BSMV
Russell, Robert J., Cpl, SS
Russum, Robert, Cpl, BSMV
Rutherford, Ralph E., Sgt, BSM
Ryals, Clyde L., Sgt, BSM
Sanderson, Burton S., Pfc, BSM
Sands, Harold R., Cpl, BSM
Santos, Mike, Sgt, BSM
Satagaj, Joseph S., Sgt 1/c, BSM
Schieffelin, Stanto, Pfc, BSM
Schmidt, William R., Sgt, BSM
Schneider, John A., M/Sgt, BSM
Schwarz, William E., Pfc, BSM
Searle, Gerald F., Cpl, BSMV
Sekula, Stephen T., Cpl, BSM
Sewing, Donald D., Pfc, BSMV
Seymore, Herman L., Sgt, BSM
Shanke, Frank, Cpl, BSM
Sherritt, Robert S., Sgt 1/c, CR
Silvers, Loran E., Cpl, BSM
Silvey, James D., Maj, MSC, BSM
Simmons, Christopher, Cpl, BSM
Sinkler, Verne P., Pfc, BSMV
Skibbie, Edward W., Pfc, BSM
Smith, Claude E., Sgt 1/c, BSM
Smith, Everette E., Pfc, BSMV
Smith, Gerald H., Pfc, BSMV
Smith, Harold W., Sgt 1/c, BSMV
Smith, Isaac S., Sgt, BSM
Smith, Jack D., Sgt, BSM
Smith, John, Cpl, BSM
Smith, Leonard J., Jr., Cpl, BSMV
Smith, Owen R., Sgt, BSM
Sobiesch, Stephen, Jr., Cpl, BSM
Soto, Pablo, Cpl, BSMV
Stayton, William R., Sgt, BSM
Steed, Raymond, Cpl, BSM
Stewart, Jack, D., Sgt 1/c, BSM
Stidd, Dallas E., Pfc, BSM
Stinson, Bobby R., Cpl, BSMV
Stokes, George F., Cpl, BSM
Stokes, Milton D., Cpl, BSM
Streetman, Roy J., Cpl, BSM
Strub, Joseph C., Sgt, BSM
Stryker, Raymond C., Sgt, BSM
Stull, George H., Sgt, BSM
Teal, William, Cpl, BSMV
Terrell, William, Cpl, BSM
Terrill, Arthur A., Capt, MC, BSM
Tessmar, Bernard, Pfc, BSMV
Thomas, Charles H., Sgt, BSM
Thomasson, Arthur F., Cpl, BSMV
Thompson, Allen T., 1st Lt, MC, BSM
Thompson, James T., Capt, DC, BSM

Thompson, Sherman R., Cpl, BSMV
Thorpe, Dale W., Cpl, BSM
Thrasher, Robert E., Pfc, BSM
Tindall, Richard C., Cpl, BSM
Tindell, Stanley A., Pfc, BSM
Tokuni, Charles M., Cpl, BSM
Toney, Bobby, Cpl, BSMV
Tracy, Juan D., Cpl, BSMV
Trammel, Mounty, Sgt, BSM
Trevino, Robert G., Sgt, BSMV
Triolo, Albert, Cpl, SS
Tubbs, Isaac E., Pfc, BSM
Turley, Robert, Pfc, BSM
Tye, Archie R., Cpl, BSM
Upchurch, Cecil G., Pfc, BSM
Valentine, Theodore, Sgt 1/c, BSM
Valmores, Tomy, Cpl, BSM
Van Antwerp, Frank, Sgt, DSC
VanAlmen, Robert P., Sgt, BSM
Vandergriff, James, Sgt, BSMV
Vaughn, Henry, 1st Lt, MSC, BSMV
Vinzant, John E., Sgt, BSM
Voter, Ronald W., Cpl, BSMV
Waddill, William C., Lt Col, MSC, BSM
Wade, Mitchell M., Cpl, BSM
Wagoner, Dale E., Sgt 1/c, SS
Walls, Dee J., Pfc, BSMV
Ward, Edward D., Cpl, BSMV
Watkins, Eskiah, Cpl, BSMV
Watson, Roland V., Pfc, BSM
Watts, Edward L., Capt, MC, BSM
Webb, Robert B., Pfc, BSM
Webster, Jack M., Pfc, BSM
Webster, Oscar J., Pfc, BSM
Weidemann, Lawrence, Sgt, BSM
Weidenkopf, Stanley, Lt Col, MSC, BSM
Welsbacher, Anthony, Sgt, BSM
West, Eugene, Pfc, BSM
Westbrook, John W., Sgt, BSM
Whisenunt, Harvie, Pfc, BSM
White, Arthur J., Jr., Pfc, BSMV
White, Donald R., Sgt, BSMV
White, John P., Sgt, BSM
White, Phillip L., Pfc, BSM
Whyland, William A., Capt, MC, BSMV
Wickstrom, Arthur P., Capt, MC, BSM
Wildberger, Paul, Pfc, SS
Wilder, Carlton E., Sgt, BSM
Wilder, Charlie, Pfc, BSM
Willey, Robert W., Pfc, BSM
Williams, Charles B., Cpl, BSMV
Williams, W. M., Cpl, BSM
Williams, Wallace E., Pfc, BSM
Willis, Frank J., Sgt, BSM
Willis, John M., Jr., Lt Col, MC, IM
Wilson, Eddie L., Pvt, BSMV
Wilson, Eldred, Jr., Sgt, BSM
Wiaberly, Thomas H., Sgt, BSM
Wind, George F., Pfc, BSMV
Winner, James L., Sgt, SS
Withee, James F., Cpl, BSMV
Wolf, Robert E., Capt, BSMV
Wolski, Bernard M., Sgt, BSMV
Woolmer, James R., Sgt, BSM
Wright, William L., Cpl, SS
Wysocki, Benjamin, Sgt, BSM
Yamata, Albert K., Cpl, BSM
Yancey, Ellis Jo, Pfc, BSM
Yeakey, Albert W., Sgt, SS
Young, John D., Sgt 1/c, BSM
Young, William H. Jr., Sgt, BSM
Younger, Edwin W., Cpl, BSMV
Zekas, Joseph, Sgt, BSM
Zwack, Wilbur E., Pfc, BSMV



DISTINGUISHED
SERVICE CROSS



SILVER STAR



LEGION OF MERIT



DISTINGUISHED
FLYING CROSS



SOLDIER'S MEDAL



BRONZE STAR
with "V" DEVICE



AIR MEDAL



COMMENDATION
RIBBON WITH PENDANT



V. THE HELICOPTER IN MEDICAL AIR EVACUATION

The thankful faces of casualties lifted from front-line positions give testimony to the acceptance of the helicopter as an important member of the Medical Services' evacuation activities.

Tried and found more than adequate to the stress of battle, the flying "mix-master" was once no more than a novelty of the Korean conflict. Now, equipped with two litter capsules, the versatile craft is routinely utilized by Army, Air Force and Marine units to reach isolated wounded and fly them to safety.

One of the most dramatic instances of the helicopter's use took place in the Chosin Reservoir area. Ground evacuation over enemy-held roads was impossible and there were no airfields from which flights could be made by cargo aircraft.

The call for aid went out and the X Corps Air Section and the Marine Air Wing responded. Helicopters from the Marine unit flew casualties from small organizations to the nearest airstrip where "L" type aircraft of X Corps shuttled them out to medical aid. The planes often found themselves subjected to small arms and other fire from Chinese Reds in the surrounding hills. More than one plane found itself in the middle of a fire fight.

"Little Lift" as it was called, was not a one-way proposition. When medicines or supplies were needed at the front, the helicopter ferried them in on the return trip.

For his part in an heroic operation near Kanggye, Korea, Captain Oscar N. Tibbetts of MATS, a helicopter pilot, was awarded the Silver Star.

Capt. Tibbetts was cited for the rescue of an injured American fighter pilot deep in enemy territory. He flew from Sinanju over 80 miles of Communist-occupied country to pick up the downed F-51 pilot. With the assistance of a medical crew member, T/Sgt James Bryson, the wounded flyer was loaded aboard under small arms fire which damaged the tail cone of the helicopter. T/Sgt Bryson, also of MATS, was recommended for an award for his participation in the rescue operation in which Capt. Tibbetts flew the last 45 minutes of the trip in darkness without night-flying instruments.

Because of its maneuverability, the plane can land in places in the mountainous terrain of Korea which are inaccessible even to a jeep. It can land next to a front-line aid station and return a patient to a rear-area hospital within minutes of the take-off. Although it hauls only two litter patients at a time, it makes many trips a day, if necessary. Shock cases, which caused many fatalities during World War II are now treated more quickly through the helicopter's use.

Recently, information was released revealing that Army contracts have been let for the largest single order of H-13B helicopters ever awarded by a branch of the military. This would be an indication of their formal acceptance by the Army. Casualties who have found themselves secure in a rearward hospital less than an hour after being wounded would concur enthusiastically.

VI. TROOPS HARDENED TO SUB-ZERO COLD

During the past few months, American troops had become hardened to living and fighting in the sub-zero cold of mountainous Korea, according to Major General Edward M. Almond, X Corps Commander. The men made the best possible use of their winter clothing and there was a constant effort to improvise front-line shelters, General Almond said.

The "warming-shelter" is a life-saver for troops in forward positions where there is no protection from the cold and where a fire would invite enemy attack. A tent or permanent structure on the reverse slope of the position provides a stove and hot coffee or soup. Men are brought back to the warming shelter in shifts for half-hour periods.

"It's a great morale booster," General Almond said in reference to the shelter. "French and Dutch troops are particularly skilled in constructing cut-and cover shelters. U. S. troops have exchanged ideas with them."

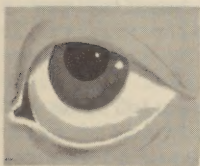
Keeping the feet warm and dry has been a big problem. Each American soldier is issued several pairs of socks. Laundries are set up at a company kitchen location and in the ration line the men exchange damp soiled socks for clean dry ones.

VII. REGULAR ARMY COMMISSIONS

Applications for the Regular Army will be accepted from qualified Reserve Officers now on extended active duty with the Medical, Dental, Veterinary and Army Nurse Corps. Applications for competitive tours of duty to qualify for entrance into the Regular Army will be accepted from MSC officers. Information can be obtained from Commanding Officers, from the Officer Procurement Section, GHQ, FEC, or from the Officer Procurement Branch, Office of The Surgeon General, Washington 25, D.C.

Due to inadequate vacancies in the Regular Army Dental Corps in grades of Captain and above, applications to these grades under provisions of SR 605-2510, dated 21 December 1949, are temporarily suspended. All applications received in The Adjutant General's Office subsequent to 20 Jan 1951 will return to the point of origin. This action affects applications for Regular Army Dental Corps only. Applications for ORC appointments or EAD will be processed under current procedures and regulations.

VIII. OPHTHALMIC PATHOLOGY COURSE CONDUCTED AT TOKYO ARMY HOSPITAL



A five-day intensive course in Ophthalmic Pathology was recently conducted at Tokyo Army Hospital by Mrs. Helenor C. Wilder, Chief Ophthalmic Pathologist, Armed Forces Institute of Pathology, Washington, D.C.

Thirty-eight Army, Navy, Air Force and British medical officers from hospitals in Japan attended. In addition, fourteen Japanese ophthalmologists practicing in the Tokyo area attended by invitation.

This five-day course consisted of lectures, demonstrations and microscopic slide studies of material furnished by the Armed Forces Institute of Pathology. Subjects included were acute, chronic and granulomatous inflammations, glaucoma, ocular pathologic manifestations of internal diseases and intraocular and orbital tumors. A practical microscopic slide examination concluded this series of lectures.

This course was presented as a portion of lectures in Basic Sciences pertaining to ophthalmology currently being conducted by the Eye Section, Tokyo Army Hospital.

A certificate from the Armed Forces Institute of Pathology will be furnished each student who successfully completed this course.

IX. RECENT DEPARTMENT OF THE ARMY AND FEC PUBLICATIONS



AR 40-680, 15 Feb 51: Medical Service - Disposition of Patients and Personnel Records

AR 40-506, C-1, 19 Feb 51: Medical Service - Persons Eligible to Receive Medical Care at Army Medical Treatment Facilities

DA CIR 11, 15 Feb 51: Sec IX: Medical Treatment in Army Medical Facilities, Fiscal Year 1951

SR 30-275-5, 29 Jan 51: Food Service - Dehydrated Food Program

SR 40-410-10, C-2, 12 Feb 51: Medical Service - Central Facilities Provided for Department of Defense by Armed Forces Institute of Pathology

T/O&E 8-580, C-2, 9 Jan 51: Evacuation Hospital

T/O&E 8-640, C-2, 9 Jan 51: Medical Field Laboratory, Army

T/O&E 8-564, C-2, 24 Jan 51: Station Hospital, 200-Bed Communications Zone

T/O&E 8-28, C-4, 26 Jan 51: Medical Clearing Company, Separate

GHQ FEC CIR 8, 19 Feb 51: Quarantine Regulations

T/A 8-12, 8 Dec 50: Army Medical Service Optician Course

TECHNICAL

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X. FIELD HOSPITAL NEUROPSYCHIATRIC SERVICE*

Captain Harold Kolansky, MC - Captain Richard K. Cole, MC

The Neuropsychiatric Service of the 4th Field Hospital served as the main psychiatric treatment center for UN Forces in Korea during the months of November and December 1950, and for this reason a somewhat detailed report is herein presented. This service was established in early October and continued to function from that time forward, except for a nine day period from 15 - 24 December when the hospital was moved from Ascom City and relocated in Taegu, Korea.

This report will be considered from the following aspects:

- (1) Professional and other personnel assigned
- (2) Organization of wards
- (3) Types and relative numbers of cases
- (4) Types of interviews and treatments
- (5) Advantages of being part of a Field Hospital
- (6) Liaison with Division Psychiatrists
- (7) Days of hospitalization and dispositions

1. Professional and other personnel assigned:

When first organized, the service had one psychiatrist. It soon became apparent that one man could not handle the volume of work and an additional psychiatrist was assigned. As the service became the main psychiatric center in this theater an additional psychiatrist was added to the staff, so that in the latter part of November and in December three were working at the hospital. It was found to be distinctly advantageous to have more than one psychiatrist, not only from the aspect of one man being overloaded with the work, but also because the more unusual cases could be discussed. In this way better care to this type of patient was afforded. The three medical officers doing psychiatry had all been in psychiatric residency (civilian and Army) before being called or recalled to active duty in this theater. Each also had some experience with psychiatric cases at Station Hospital echelon in Japan before coming to Korea. In addition a nurse was assigned to the service during October and November, but it was found to be an unnecessary luxury for the patients. The assignment of a nurse tended to play up the hospital atmosphere and increased the possibility of secondary gain from neurotic illness. Thus, in the month of December, no nurse was assigned to the service. Four enlisted men with varying periods of training in neuropsychiatric work were assigned to the service. During the peak hours two medical technicians were on duty, and during the later two periods of the day one medical technician was on duty. The medical technicians were responsible for the assignment of beds, insistence on shaving, showering and eating, administration of routine medications, and observations on sleep, eating and behavior of patients. The Chief Psychiatric Consultant for FEC made several visits to the service during the period of operation, and saw and discussed patients with psychiatrists. During these visits he also held consultations for the other services.

2. Organization of wards:

Both in Ascom City and in Taegu the wards of the Psychiatric Service were separate from the Medical and Surgical wards. This was felt to be necessary due to the so-called infectiousness of some psychologic symptoms. The psychiatrists had separate small offices in the same ward section. Beds used were army cots and patients made their own beds, usually. Food was not served

*Extract from 1950 Annual Report of Medical Activities, 4th Field Hospital, APO 301

on the ward, all patients having been encouraged to go to the mess hall for meals. The wards were located in permanent type buildings and there was adequate heat. At no time were we limited in number of beds or in length of hospital stay. An attempt was made to segregate patients going to limited duty, full duty, and to Japan (evacuations). This, however, proved to be impractical due to the short period of hospitalization. In general, interviewing and treatment were carried on in the private offices. Consultations from the rest of the hospital were seen on the psychiatric service, except in those cases where patients were confined to bed, and of course in these instances the psychiatrist went to the patient.

3. Types of Cases seen:

It soon became apparent that the types of cases differed somewhat while troops were engaged in active combat and while there was a break in activity. During combat with the enemy there was an upswing in the number of moderate and severe anxiety reactions and in conversion reactions, while in the periods between combat there were slight decreases in the number of anxiety and conversion reactions. In their places other neurotic reactions, psychotic reactions, character disorders, and immaturity reactions were seen. The overall picture included approximately 70% neurotic reactions, 10% psychotic reactions, 12% character disorders and immaturity reactions, 2.5% neurological diseases, and 5.5% no disease found (including very poorly motivated soldiers and normal combat reactions as described by Ranson). The average daily admissions varied considerably depending on numerous factors, including the tactical situation of the day, availability of transportation from the front, number of surgical casualties who had to be evacuated first and availability of holding beds for the Division Psychiatrists at clearing stations. In general there were 1-30 admissions daily, the usual number being 15-20. During the latter part of November when Chinese forces began an all-out push, the number of admissions on several days was between 50 and 90. It was noted that usually there was a 2-5 day lag between the time surgical casualties began to arrive and the time psychiatric casualties began to arrive during active combat. Anxiety reactions were by far, the most frequent entities seen, with conversion reactions next in frequency.

It was soon learned that the symptomatology of the anxiety reactions was of little importance; it varied from patient to patient, but almost universally the conflict was very close to, if not at the level of consciousness. This conflict seemed always to involve directly the combat situations and the dangers to the individual inherent to this situation. As will be mentioned below under the discussions of interviews and therapy, the therapist could quickly "peel away" the symptom layer, and could discuss directly with the patient the conflict of which the patient was at least partly aware. In some perfectionistic, compulsive individuals defenses would quickly break down under the conditions of battle which did not lend themselves to perfectionism, and these individuals would then develop a tremendous amount of anxiety. But in general the anxiety reaction was seen in individuals who were not of necessity compulsive, and who had been exposed to a considerable amount of combat. The backgrounds and family life of these individuals varied considerably and we can report nothing conclusive in regard to this at this time although we are attempting to study this.

The severe anxiety reaction was usually found in an individual who had considerable combat in this campaign (and sometimes in World War II as well). He would usually come in looking markedly fatigued with face drawn and expressionless or full of terror. Tremulousness, voice difficulty, dilated pupils, rapid pulse, profuse sweating tremors, and sometimes tearfulness were seen. The subjective complaints usually included insomnia, anorexia, more than the usual weight loss, battle dreams (which seemed always to be attempts at mastery of a situation in which the individual felt he had failed). Usually there is an immediate precipitating factor which assumes great importance in such individuals, such as the death of a friend with whom he has gone through numerous fire fights, or the inability to remove one of the wounded of his platoon while under fire. Usually the neurotic symptoms do not appear till after the individual is removed from danger. This protective mechanism has been noted in the other psychiatric syndromes as well.

The less severe anxiety reactions are somewhat similar in symptomatology, but symptoms are not severe and frequently the individual has just gone into combat for the first time although he may have been in Korea for some time previously.

In the perfectionistic officer or soldier, when the psychologic defenses break, depression frequently becomes part of the anxiety picture. Typical of this type of reaction was a 25 year old platoon leader (1st Lt). This patient came in with marked apathy, anorexia, psychomotor retardation, constipation. He said: "War is hateful, useless, terrible - I'd like to evacuate my whole platoon. Poor boys, I'm a misfit; I could have taken one of my wounded out, but I couldn't because of the shooting. He died. I'm no officer!" This history of this patient revealed that he had "straight A's" in college, had been an excellent infantry lecturer, had been

a pride to his outfit in the United States and had done very well on maneuvers. When he finally became a platoon leader after three months in Korea, the difficulties of combat broke his defenses down and his punishing superego took over with resultant severe anxiety symptoms and depression.

Conversion reactions as well as anxiety reactions almost always developed after the danger had passed. Many gross hysterical phenomena including total paralysis of both lower extremities, blindness, deafness or amnesia were seen and all patients seemed to have a moderate to a great amount of indifference to their symptoms. These seemed to occur frequently in passive individuals after the first show of hostility by such individuals. Typical of this was a 20 year old Pfc who came into the hospital after being treated for an upper respiratory infection for one month because of inability to talk above a whisper. This individual revealed under amytal that just prior to the development of aphonia he had killed some enemy soldiers (for the first time) while on temporary duty with a rifle company. This apparently disorganized his passive defenses, allowing a conflict to break through with resultant aphonia. This patient was quite passive and said, "I always walk away when I'm angry; that's best."

Surprisingly, a large number of the psychotic reactions seen were in base troops or troops who had been in Korea but a short time. The symptoms were those of the usual psychotic reactions as seen elsewhere. Minimal stress in these cases either accentuated already existing psychosis or tended to push the markedly regressed individual into psychosis. A 26 year old private who'd been in Korea two weeks came into the hospital because "I have to go to the latrine often at night to urinate." It turned out that this individual had been responding to auditory hallucinations rather than urinary urgency. The voice was usually that of his grandmother, long since dead. This individual had been raised by a domineering mother and a passive father who never allowed him to date or go out of town. He'd been rejected by the draft boards in World War II on several occasions, and had made fair adjustment in a box factory for several years. He then had made a marginal adjustment during a year of active duty in the Army in the United States after which he was discharged. Recalled in November 1950 from the enlisted reserve and hearing he was going to Korea, he developed intense fear and, "heard many strange voices on shipboard due to my seasickness." On admission the patient had flat affect, silly laughter, auditory hallucinations, irrelevancy, withdrawal from others on the ward, and he was diagnosed as schizophrenic reaction.

Among the group labeled "No disease found" were several with the normal combat reaction (Ranson). These showed minor sleep difficulties at the front, tremulousness, anorexia, apprehension and other symptoms. When these patients were acquainted with the fact that most of their buddies had these symptoms they were relieved, and after a good night of sleep were quite willing to return to combat. Also in this group were patients with one or more subjective complaints and almost no anxiety. Typical of such individuals was a 22 year old aidman who complained of "night blindness." When questioned, it appeared that he could not see in the field when the moon was out of phase and flashlights were not allowed. Other than mild myopia, the patient's eyes were normal. He'd lived in Boston most of his life and had no occasion to walk around without lights and was never particularly aware of the difference in ability to see at night without lights when the moon was in different phases. He could see perfectly well in the field with a flashlight, or when the moon was full. He was introduced to these factors, and being a well-motivated soldier, he soon went back to duty.

Being at an Army level, in addition to getting patients from division clearing stations which were the usual sources of patients, the service also received patients from base units. Many of these were character-disorders, and all were returned to their outfits for administrative handling, rather than to bog down the medical channels with such individuals.

4. Types of Interviews and Treatment:

Each patient was seen on his first hospital day and each day of hospitalization by his own psychiatrist. Usually only one psychiatrist saw the patient but sometimes he was seen by two. Usually during the initial interview (which lasted 15 to 30 minutes) the psychiatrist would listen to the patient's history and after this was obtained, the doctor would attempt to have the patient disclose quickly the conflict by questioning which was directed toward the minimizing of subject complaints. Once the veneer of symptomatology was removed one could discuss with the patient his actual fears of combat, anger at a superior or feeling of inability to do a job for which he may not have been too well suited. Great emphasis was placed in this form of brief, directive psychotherapy upon the current situation rather than upon an often unreliable past history (which patients frequently exaggerated to make it appear that they had a lifelong neurosis). This type of therapy, drawing forth the feelings of the patient in relation to current events, was carried on the following day or two of hospitalization. With this treatment, anxiety frequently lessened or disappeared as the patient began to understand what he was really concerned about. This therapy was effective at this level because rapid evacuation inhibited a complete establishment of the

neurosis. The conversion reactions were treated by means of strong suggestion, or abreaction usually under amytal narcosynthesis. Coramine in large doses was used to a great extent following amytal, in an attempt to have the patient wake rapidly following the abreaction. We were not overly impressed with the use of coramine over the non-use of coramine. Almost all conversion reactions became asymptomatic under this form of treatment and most could at least be returned to non-combat duty if not combat duty. It was interesting to note that when the defense of conversion was removed thus, almost all patients, rather than becoming gratified at being able to walk or see, would become extremely hostile toward the therapist. This would usually pass off before the patient returned to duty or would at least become lessened. Included in treatment was a routine insistence on cleaning up, shaving, and eating within the first 6 to 12 hours. With severe anxiety reactions and psychotics, amytal sedation was used the first night starting with 6 grains and with repeat amounts until enough had been given to insure restful sleep. (In general, sedation was used sparingly and was never routinely ordered.) Frequently a moderate anxiety reaction looked much improved after the patient merely cleaned up and had a good night of sleep. Brief outpatient psychotherapy was attempted with several patients from base units. The accentuation in interview and therapy was always on the current situation in combat and what was happening in the interpersonal relationship between patient and doctor. The patient was not allowed to use the cloak of symptoms without exploration of the conflict. We are much encouraged by our results using this form of psychotherapy.

5. Advantage of being part of a Field Hospital:

Having a main treatment center operate as part of a Field Hospital in a combat theater was different from the usually independent psychiatric treatment centers of World War II. Its advantages were many to the hospital staff and to the patients on the other wards. By so operating, liaison with the medical and surgical services was gradually established so that numerous consultations were being sent to the psychiatrists -- the usual number being 5-9 per day but often being as many as 12. In addition, there were always consultations from outside units. Some of the "mysticism" frequently cloaking psychiatric work in the minds of other doctors was removed by having psychiatric patients on their own wards whose problems they were able to discuss at liberty with the psychiatrists. It is felt that teaching the principles of psychiatry and psychosomatic medicine to the medical officers on the other services was both an appreciated as well as an important function of this psychiatric service. The importance of situational and psychogenic factors in causation of illness was thus seen by the other medical men through consultations on their own patients. It was felt that as a result of this liaison, the other medical men developed greater facility in diagnosing, handling, and returning to duty those on their own services who had psychologic factors in their illness. Numerous unofficial conferences were held in relation to psychogenic factors in illness between the other medical officers and the psychiatrists. An indication of the awareness of psychogenic factors in illness by the other medical officers was the fact that well over 150 consultations were held in the month of December. We became well aware of the fact that admission of patients to a psychiatric treatment center in no way reflected the large incidence of disease of psychologic origin, for the medical and surgical services saw large numbers of self-inflicted wounds, syndrome of cold feet, gastrointestinal reactions and other psychosomatic diseases.

6. Liaison with Division Psychiatrists:

Almost all psychiatrists in Korea were known to one another, and the Division Psychiatrists would occasionally come to the 4th Field Hospital where mutual psychiatric problems could be discussed. In this way those of us on the Psychiatric Service at the 4th Field Hospital knew and appreciated some of the problems and difficulties of the Division Psychiatrists. For example, some of the Division Psychiatrists at times had a very difficult time obtaining sufficient holding beds in clearing stations. We were aware of increased admission rates from divisions at these times. This of course played a part in our record for returning large numbers of patients to duty. If the Division Psychiatrists had been able to hold patients longer in some instances they would have been able to return them to duty before they reached this level. A certain number of patients obviously evacuated for psychiatric reasons, but who were tagged with medical or surgical diagnosis by battalion surgeons to prevent them being seen by Division Psychiatrists, were picked up on medical or surgical wards.

7. Days of Hospitalization and Disposition:

The average hospital stay of patients was 2 to 3 days. Some 65% to 70% of patients were returned to duty, of which about 40% to 50% went to full duty and the rest to limited duty. Some 10% went to Pusan or to a hospital ship during early December when the situation was so fluid that the hospital days were reduced to one. Any patients needing more than this were evacuated -- about 20-25% to Japan. It is felt that among the factors influencing the large number of

returns to duty as compared to those in World War II is the fact that although the treatment center was often 200 miles from the front, the rapidity of transportation by air was such that there was no long slow trip back to a treatment center behind the division clearing stations. This time could have been adequate for the fixing of some symptoms. Also since the discomforts are inherent to all parts of Korean, combat area or not, secondary gain factors were lessened. Lastly, it is felt that the shortened stay of 2-3 days decreases the time during which secondary gain might develop.



XI. DEBRIDEMENT, PAST AND PRESENT

Colonel Oral B. Bolibaugh, MC, Orthopedic Consultant, Medical Section, GHQ, FEC

The term "debridement" was introduced by the French surgeon, Pierre Joseph Desault (1744-1795). Baron Larrey (1766-1842), Napoleon's surgeon, defined debridement as the act of making an incision or enlarging a wound in order to facilitate the removal of a missile or other foreign body and to provide drainage.

We learn from medical history, however, that this procedure which we now call debridement is very old indeed. Ambroise Pare (1510-1590), in his work on the treatment of gunshot wounds, directed that the wound be enlarged for the purpose of drainage and that bullets, foreign bodies, and bone splinters were to be removed. Celsus (BC 25-AD 50), writing on this subject at the beginning of the Christian era, made the following observations concerning wounds: "When a man has been wounded who can be saved, there are in the first place two things to be kept in mind; that he should not die of hemorrhage or of inflammation." After describing the methods of controlling hemorrhage, he continues: "But there is an underlying fear of another kind, that if too much diseased matter is forcefully retained in the wound, it will afterwards cause great inflammation." It is quite clear that these early writers appreciated the dangers of infection and understood the basic principles in the surgical treatment of wounds.

Our present knowledge of the treatment of gunshot wounds is based upon experience gained in the first World War (1914-1918) when the term "debridement" came into popular usage. The procedure consisted of removal of devitalized tissues, particularly muscle tissue, and foreign bodies through an adequate incision, the purpose of which was to control and prevent infection and to establish adequate drainage. Trench warfare in Northern France, where the soil was highly fertilized, created conditions most favorable for bacterial contamination of wounds. As a result, severe infections, both aerobic and anaerobic, occurred in most instances. It was soon learned that thorough debridement would control infection if performed early, preferably within the first 6 or 8 hours, provided the wounds were left wide open. Furthermore, when there was severe vascular impairment of an extremity with pyogenic or clostridial infection present, a guillotine amputation was often necessary in order to save life.

The lessons learned in the first World War were generally accepted by surgeons at the outbreak of the late war. No doubt there were those who believed that sulfonamides and penicillin would sterilize wounds, thus rendering debridement unnecessary or at least less urgent. However, the fallacy of this belief became apparent when sufficient time had elapsed to appraise these agents and to determine their true value as well as their limitations. Thus the importance of debridement became even more self-evident.

One of the outstanding developments of the late war was the early secondary closure of gunshot wounds. Antibiotics undoubtedly contributed to the success of this procedure but of greater importance was the complete removal of devitalized tissue and foreign material at the time of initial surgery.

In 1946, The Surgeon General of the Army inaugurated a program of residency training in Army hospitals. On 25 June 1950, when the North Koreans crossed the 38th parallel and our troops were committed to the defense of South Korea, relatively few of our residents had completed their training. Furthermore, the Medical Corps was greatly understrength. In the Far East Command there was only one general surgeon who was Board certified and only one Board member in any of the surgical specialties, an ophthalmologist. Most of our medical officers were young men trained under ASTP and had just completed their internships. Such was the state of affairs when we were suddenly called upon to take care of large numbers of battle casualties in Korea in the early days of July 1950.

In May 1950, 19 residents with 28 other medical officers were sent from our hospitals in the ZI

to the Far East to replace ASTP's whose term of service was completed. Early in August 1950, 103 additional residents were flown to the FEC. Most of these officers had completed two years of training but none had had surgical experience in the last war. These were the men who staffed the evacuation hospital and the three mobile Army surgical hospitals in Korea and also filled many of the key professional positions in the hospitals in Japan.

The nature of the warfare, the mountainous terrain in Korea, and the tremendous odds against which our men were fighting in the early months, rendered evacuation of the wounded most difficult. Wounds were contaminated with the soil of rice paddies fertilized with human excreta where men were forced to lie for hours until they could be evacuated. A

During these early days, many wounds were inadequately debrided. These young men were doing this type of surgery for the first time in a strange and unusual environment without any help or advice from older surgeons. Antibiotics no doubt gave a false sense of security to some. Often there were so many patients waiting to be operated on that the surgeon felt that he could only devote a limited time to each case. These are the reasons why some patients arrived in Japan with badly infected wounds. The same was true of a few cases arriving in hospitals in the zone of interior.

However, these young men were quick to learn the technique of debridement and in a short time the great majority of the cases arrived in Japan with wounds in excellent condition. Statistics indicate that the mortality rate in battle casualties reaching hospitals near the front is very low and compares favorably with the best figures in the last war. Furthermore, reports received from hospitals in the zone of interior indicate that the patients were arriving in better condition than during the last war.

These facts speak eloquently for the excellence and the importance of our training program. Men who were only partially trained were able to cope successfully with major surgical problems and obtain excellent results. Without these men, the medical service in Korea would most certainly have broken down.

An historical review of the treatment of war wounds clearly indicates that the final results depend more upon the adequacy of the initial debridement than any subsequent procedure. This is equally true today as in the past.

The advent of antibiotics has in no way replaced the surgical treatment of gunshot wounds and must be considered only as an adjunct to treatment. Surgical judgment dictates that debridement must be thorough. A skin incision, 6 or 8 or 10 inches long, or even longer, is often necessary in order to reach the depths of a wound. Only a minimal margin of skin is to be excised as it is very vascular, resists infection, and is needed for later secondary closure. All devitalized muscle must be cut away back to bleeding normal tissue. Bits of clothing and other foreign matter must be removed. Metallic foreign bodies that are not freely accessible in the wound should not be disturbed as they are rarely the source of trouble. Fragments of bone with muscle or periosteal attachment should be left as they will often act as grafts to aid bony union of a fracture.

Gunshot wounds of the extremities should not be closed primarily. This cannot be emphasized too strongly. Unfortunately, a few surgeons in Korea persisted in closing wounds in the forward hospitals. I have seen these cases in Japan. The wounds invariably break down with severe infection and needless destruction of tissue. Several closed amputations were done by this same group. These were grossly infected and will require reamputation with the loss of valuable stump length. In one instance, the patient will lose his knee joint.

Wounds should not be packed with vaseline gauze. Fine mesh vaseline gauze placed over the surfaces of the wound with fluffs of gauze placed loosely in the wound makes an excellent dressing. Most large wounds whether or not associated with compound fractures should be immobilized in plaster of paris for transportation.

Treated in the manner described above, wounds will heal most rapidly. Morbidity will be reduced to a minimum and reconstruction procedures will be greatly facilitated. Lessons of the past, so often forgotten, frequently apply with equal truth to the problems of the present. Debridement of wounds is no exception.

XIII. MOBILE ARMY SURGICAL HOSPITAL ACTIVITIES

Extract from 1950 Annual Report of Army Medical Service Activities of the Mobile Army Surgical Hospital, 8055th Army Unit, APO 301



The mission of the Mobile Army Surgical Hospital, 8055th Army Surgical Hospital, 8055th Army Unit, is to receive non-transportable patients from adjacent division clearing stations and prepare them for evacuation. Many times this hospital has been the only medical organization above the clearing station level available in the area for the care of sick, injured and wounded and as a result has accepted all types of patients.

The surgical cases that were received and considered non-transportable usually included head injuries, chest wounds, abdominal perforations or eviscerations, and severe compound fractures of the extremities. Many wounds of the extremities, often even fractures, could have been sent to rear echelon installations for debridement and treatment, but were operated on in this hospital when time allowed, in order to minimize the number of hours of wound exposure to debris.

Severe head injuries were for the most part treated elsewhere. However, it was felt that some would die before reaching a neurosurgeon and on these surgery was performed by that member of the team who had had the most neurosurgical experience, however limited. It was felt that it was the best that could be offered to the patient. On severe head injuries, when immediate air transportation was available and the patient was in good condition, he was immediately flown to Japan for neurosurgery at a general hospital in Japan. Many cases presented surgical procedures that were beyond the previous experience of the surgeon, but it resolved to meet the situation of the surgeon performing the operation to the best of his ability; it was all that could be offered to the patient who would probably shortly expire if not operated upon.

Very little attempt was made to diagnose and treat medical cases due to the limited facilities available for this type of work. The laboratory facilities are limited and are primarily for wounded or operative patients. The emphasis in the hospital from its activation has been on surgery of war injuries and all services rendered by the hospital are slanted toward the surgical management of cases. The hospital wards are equipped with large quantities of intravenous equipment, gastric suction tubes and machines and electrical suction devices. Oxygen is kept in superabundance.

The hospital has received patients from the 1st Cavalry Division, the 2d, 24th and the 25th Infantry Divisions, the 27th and 29th British Brigades, the Turkish Brigade, the Philippine Expeditionary Force, the Greek, Thailand and Dutch United Nations Forces and from many separate battalions and companies. It has functioned as a surgical hospital for an entire battle sector and at other times worked close by another surgical hospital of the same design. In the early days of the Korean conflict patients arrived by ambulance and by redesigned Korean hospital trains. Korean baggage cars were equipped with shelves for supporting litters and were used extensively. The jeep ambulance came in for its own and trucks were used on occasion for transporting ambulatory patients. As time progressed American hospital trains arrived from the United States and were a vast improvement over the Korean trains.

Probably the biggest single advancement in the evacuation of patients from the battle area to the surgical hospital was the introduction of the helicopter, originally designed for pilot pickup duty. With the use of the helicopter patients were in the hospital in a period of one half hour to an hour following injury. This type of evacuation was important in that many times, due to quick changes of the battle situation and fast advancements, the patient had to be evacuated as much as 100 miles and probably would not have survived a long ambulance trip over notoriously poor and rough Korean roads. The same roads are usually convoy laden, thus holding up traffic even more. Another extreme was the patient injured many hours previously who arrived at the hospital with all effects of medication worn off (an in a few cases with no medication since the initial wounds). This patient may have travelled up to 50 miles over rough and narrow mountain roads with a serious injury, suffering severe pain, and probably in shock. When heavy fighting is in progress there can never be too many helicopters for transporting wounded.

The preoperative care of surgical patients revolves around the work of the medical officer assigned to that section. He must constantly be on the alert, as he screens the arriving patients, sending the non-surgical cases to the holding section and orders necessary laboratory work and fluids as well as x-rays on the surgical cases. Following the removal of the clothing the wound was examined and the essential data ordered. It was found extremely important at this point to make a thorough, though often hurried examination, lest patients go to surgery with unnoticed wounds or wounds leading to shock for which the patient may not have been treated. Proper work-up and preparation of the patient is an absolute necessity.

In the early days of the conflict in Korea oftentimes patients arrived with sulfa powder or crystals sprinkled in their wounds. The British medical officers still persist in this practice up to the present time. This complicates inspection of the wound and debridement of the wound. In weeding out the non-surgical cases the preoperative doctor found himself treating minor wounds not going to surgery.

The treatment of shock can not be over emphasized. Practically all the patients arriving here have been either wounded or sick for a number of hours and possibly vomiting or had severe blood loss. It is almost universal that every patient sick enough to be held on a ward is in need of fluid of one type or another. If he is to get blood, fluid is started immediately and then replaced by blood after routine cross matching. Many patients are too near the edge of vascular collapse to wait for blood. Some patients are in deep shock necessitating the pushing of a large volume of fluid to build up blood pressure. This frequently increases blood volume to enormous amounts, no doubt increasing the work of the heart which is already under the strain of too little oxygen. Many times shock could have been forestalled by earlier treatment, perhaps faster treatment right at this hospital. Even so-called minor compound fractures are in shock occasionally, though little blood may have been lost. Certain rules should be established in the preoperative section of this type of hospital. Every abdominal case should immediately be put on suction preoperatively. X-Rays, anterior, posterior and lateral are essential as well as up-rights, frequently to show if air from a perforated viscus exists. Urine specimens should be taken on all abdominal cases for urinalysis. In questions of acute abdominal disorders of non-traumatic nature, routine blood counts are necessary. It is essential to have all this data at hand in the operating room as cases arrive in surgery. When the surgeon is busy and has little or no spare time between cases it is essential to have all this data at hand in order to attend properly an already acutely ill or injured patient. An x-ray marked incorrectly as to right and left, or missing laboratory work can cause valuable time to be lost while the surgeon makes a check for missing information.

In the handling of a large number of small debridements it has been found necessary to give the premedication for surgery intravenously as it is difficult to foresee at what time the next patient would go to surgery. This hospital found that a 15 minute interval following intravenous medication was usually adequate and gives more flexibility in shifting the sequence of patients going to surgery.

Some patients in shock failed to respond on whole blood. On such cases a pump was placed on the blood bottle and given under pressure. This was the only way of getting blood to this type of patient fast enough, but at its best is a dangerous procedure. It should never be done unless under strict supervision of a medical officer or nurse. If the blood should run out the patient may suffer an air embolism.

It was found necessary to set a deadline on the irreversible shock patient and with failure to raise blood pressure following strenuous therapy it was necessary to operate even though in shock. Surprisingly, a large number of these patients had raised pressures when the source of bleeding was found and stopped. In many cases they left surgery in better condition than upon entering surgery.

A large portion of the surgery is orthopedic work. It was not always essential to have an orthopedist doing the surgery as the simpler cases could be readily managed by a general surgeon. However, it was relieving when an orthopedist arrived to join the organization. His services are indispensable -- either in personally operating upon the difficult cases or in advising. More experience is afforded in orthopedics in a surgical hospital in a few months than is seen in civilian practice in years. It is simultaneously very heartening and very discouraging; heartening in the good clinical experience of surgery performed on patients who are obviously in need of it; discouraging in that only the first stage of the therapy is seen. Of immense interest to a surgical hospital orthopedist would be an opportunity to work in a hospital that received those patients for their follow up and definitive treatment.

It would, perhaps, be an improvement if the staff of the hospital included two orthopedic surgeons. In times when the battle casualty patient load is heavy the orthopedist is restricted to surgery of compound fractures of the femur, all other orthopedics being done by general surgeons. In times when the battle casualty patient load is light, extremity surgery constitutes approximately 75% of all surgery performed.

Battle casualties make up the most important and extensive injuries. When they occur they are usually of an extensive nature -- often multiple with considerable bone and soft tissue damage, requiring considerable surgery. Unless contra-indicated a wound is debrided of necrotic tissue, dirt, particles of clothing, and usually of loose unattached bone fragments. Severed tendons,

nerves and vessels, when identified, are noted on operative report for the convenience of the surgeons at the next installation. In the case of fractures, a plaster of paris cast is applied for better transportation of the patient.

The majority of gastro-intestinal surgery was done under extremely adverse conditions with patients in impending shock, and multiple transections and perforations with a large amount of spillage of feces and food. Most of the small perforations of the large bowel were closed with colostomies. Suction on the levine tube plus urethral catheterization preoperatively was found to help greatly in abdominal explorations, frequently already complicated by distended bowel or large amounts of free blood. Thoracic wounds were often not brought to operation as they respond to thoracentesis or closed thoracotomy. Only in those cases of sucking chest wounds, massive uncontrolled bleeding or suspected lung damage was an open thoracotomy performed. The young age group of the casualties explains the high rate of survival of such massive wounds.

It is of interest to note that many chest wounds also had diaphragm and possible liver, stomach, or spleen involvement. Wounds such as a large fracture of the dome of the liver, which could not be reached through an abdominal incision could readily be exposed through an enlargement of the chest wound and diaphragm. Chest catheters were limited as many were of too small a caliber or too flexible. The best were found to be endotracheal tubes.

Rarely was it necessary to remove a kidney and removal was only performed when severely damaged or when a pole could not be amputated and closed. Most of the genito-urinary surgery consisted of plastic surgery to the penis, closures of perforated or ruptured bladder with a supra pubic cystotomy or occasionally an orchidectomy.

It was found that it was dangerous to take an already extreme patient under too deep an anesthesia. Curare, which was lacking, would have been of help in these cases. In many situations where other than trained anesthetists were available the general duty medical officers satisfactorily administered anesthesia for debridements, simple fractures, and other minor cases. The lack of a large enough anesthesia staff provided a block to the speed of operating upon the major cases. When the nurses are away from the unit it leaves one remaining anesthetist, and under a heavy patient load the expediting of cases is hindered.

Gas gangrene presented a difficult isolation problem. Surgery was frequently performed on such cases in hallways in order to prevent contamination of the main operating room.

The surgeons do not care to do neurosurgery due to lack of training and experience. The amount of traumatic surgery performed has led to more confidence in surgical judgment and operating technique and at the same time has shown where points of weakness lie. Even though the surgeons had been doing traumatic surgery previously, the amount and extent of this type of work had never been presented before and invaluable experience has been gained. A qualified surgeon, MOS 3150C, or preferably B should be assigned as a guide to the younger, less well-trained surgeon. Generally the surgical principles evolved out of World War II were adhered to and have proved to be sound. Certain variations have been used with the new antibiotics as a supporting agent and have proved themselves to be safe surgical practice. During peak loads three surgical tables are in operation on a 24-hour basis.

The care of the post-operative patients is a very important one. With careful administration of intravenous fluids, the use of gastric suction for distension, the generous use of antibiotics as indicated for infection and finally with careful nursing and analgesics, seldom does a patient fail to make a rapid post-operative recovery. Only in the minority of cases is it necessary to resort to oxygen, electrical suction, or forced transfusions. Patients are evacuated two to three days post-operatively except for those gastrointestinal patients with gastric suction who remain until the tube is removed. Also held were all cases of extremities in which circulation was in doubt until a definite delineation appeared or the extremities appeared to have good vascular supply. Intravenous penicillin in large amounts was often the agent bringing about a rapid recovery in severe toxic post-operative abdominal cases. Streptomycin was used in the dosage of one quarter gram every six hours on these cases. It would be interesting to know if any complications arose from this drug. A follow-up program would be of great advantage on these cases inasmuch as they are quickly evacuated from this hospital. Due to the large number of cases it would indeed be difficult for follow-up of any particular patient.

The holding section receives the less serious patients from the post-operative section and cares for them until they are evacuated. All medical cases not involving x-rays are sent directly to "holding" for treatment and evacuation. The division clearing stations make it a practice to send patients in for x-rays and these cases are placed in holding sections until they are returned with their x-rays to the clearing stations.

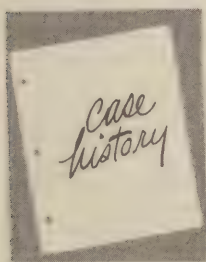
Pharmaceuticals are carried in abundance for the care of wounded, but there is little available for general medical care such as is given in an out-patient or general dispensary. The pharmacy stocks enough medicinals to be able to supply the minimum of dispensary care for medical cases. The laboratory facilities are limited, with primary function being the maintaining and preparing of whole blood. A large amount of "extra" laboratory work can be done and this is gradually being increased. Frequently urinalyses are necessary to check for the presence of blood in the genito-urinary tract.

The x-ray examination for incidental disease has more than doubled the x-ray load. An extension of available service of the pharmacy, laboratory and x-ray sections brings a greater pressure to bear on the personnel. It is easily possible to acquire the necessary equipment to perform the service, but without additional personnel this becomes difficult and even hazardous. Fluoroscopic examination of patients would be highly desirable in many cases. However conversion of the machine with the concurrent heavy exposure to radiation would soon become very dangerous for the technicians. Some difficulty has been encountered with developing solutions in the near zero weather in Korea. Maintenance of equipment in this section is a continuous problem. X-ray diagnosis is highly desirable in that it frequently provides information for the proper channel of evacuation.

Evacuation of patients has been accomplished with every mode of transportation. In the early stages of the war, Korean hospital trains were used for evacuation to Pusan. By far the vast majority of the serious cases were removed from the hospital to the nearest air strip and flown to Japan, where the patients arrived at a modern Army hospital with all facilities, in a matter of a few hours. When no trains or air strips were available the invaluable helicopter was used to move the serious post-operative cases to an installation from which further evacuation could take place. The helicopter was used as much as possible for removal of neurosurgical patients to an air strip for evacuation to Japan. Seldom was evacuation by water to Japan used since this hospital was rarely located near a port.

On some occasions when immediate withdrawal was necessary from an area, a few post-operative cases were evacuated earlier than was desirable. This was only resorted to when absolutely necessary, and then the patients were moved by helicopter to the next medical installation to the rear. Fortunately these patients survived these moves in good shape.

Prisoner of war patients were treated in the same manner as United Nations military personnel or United Nations civilians. Korean civilians were rendered emergency treatment and then transferred to Korean hospitals. If no Korean medical facility existed in the area, Army evacuation channels were used to the nearest Korean hospital. When an area had been taken and prior to establishment of a Korean hospital, the local civilians usually found their way to this hospital and on one occasion arrived in large enough numbers to present a problem of treatment and evacuation.



XIII. GUNSHOT WOUND OF ABDOMEN, WITH MULTIPLE COMPLICATIONS

Major Ralph G. Thomas, MC, Surgical Service, 4th Field Hospital, APO 301

R.J.R., a 19 year old white male assigned to the 8th Cavalry Regiment was wounded by enemy small-arms fire at approximately 1800 hours 5 February 1951. He passed through a battalion aid station a half hour later, where his wound was dressed and he was given 1/4 gram of morphine. He was then evacuated to the regimental collecting company, and thence to the clearing company of the medical battalion. He arrived by air to this unit some 20 hours after receiving his wound.

On admission, the patient appeared acutely ill. There was a perforating wound of the abdomen, with point of entrance just above the mid-portion of the right inguinal ligament, and point of exit posteriorly to the left of the midline at the level of L4. The patient showed signs of clinical shock. The abdomen presented board-like rigidity and was silent. Catheterized urine specimen was negative for blood; rectal examination showed bright red blood on the examining finger. There was no neurologic impairment of either extremity.

Nasogastric suction was instituted and the patient was given nasal oxygen and 1000 cc of whole blood. 600,000 U of penicillin and 1 gm of streptomycin were given intramuscularly. After some 2 hours of pre-operative preparation, his general condition was deemed suitable for exploration.

Laparotomy was accomplished under endotracheal GOE anesthesia. The abdomen was explored through a generous lower right rectus muscle splitting incision. There was a moderate hemoperitoneum of

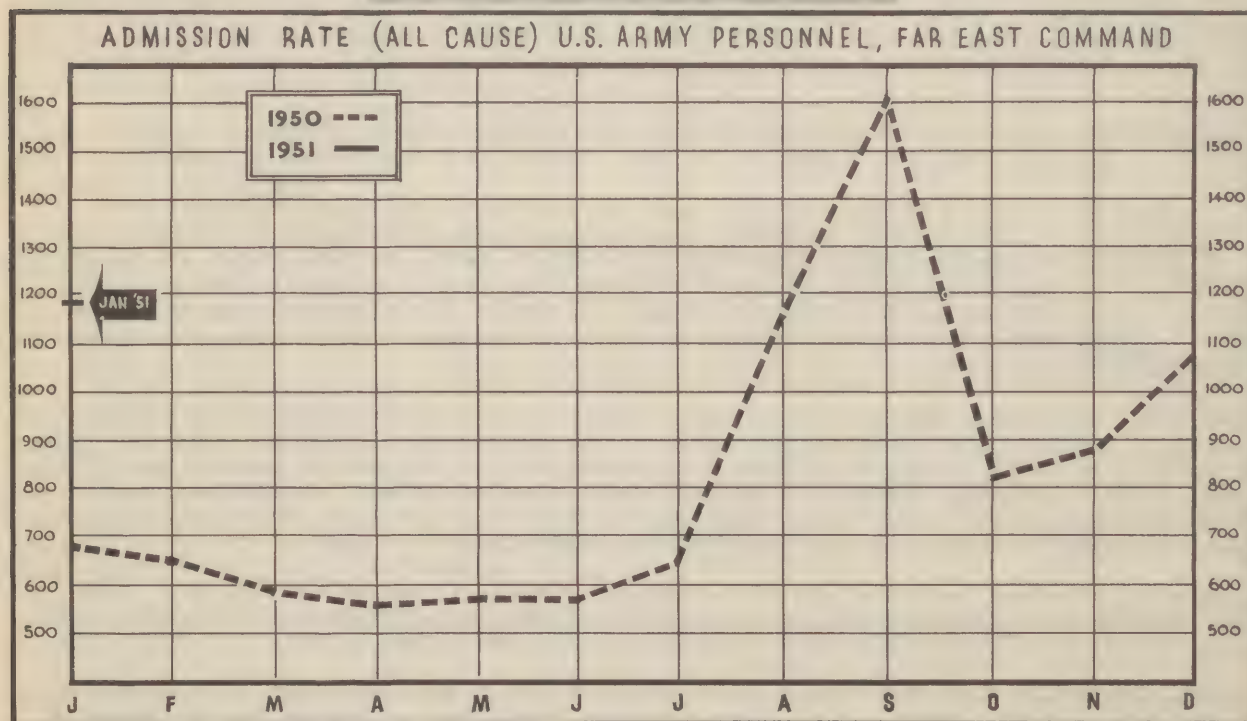
both new and old blood. Both the visceral and the parietal peritoneum were of a dull grey color, with adhesive plastic exudate on the surface. There was much distention of the small bowel loops. Some 2 feet from the ileo-caecal junction, there were 6 points of ragged laceration over a 12 inch area of the ileum. This area was resected, and end to end anastomosis accomplished. There was a 2 inch laceration of the fixed portion of the pelvic colon which was closed, and a defunctioning transverse colostomy made through an upper left rectus incision. There was no other apparent intraperitoneal damage. The wound was sutured incorporating 4 wire stays in the closure. The point of closure of the pelvic colon was drained through a stab wound above the left inguinal ligament. Both wounds of entrance and exit were widely debrided, and left open. The patient's general condition at the conclusion of the procedure was considered fair.

Post-operatively, the patient was placed on a peritonitis regime including naso-gastric suction, parenteral fluids and whole blood, penicillin, streptomycin and parenteral vitamins in full therapeutic doses. His early course was characterized by marked distention of the abdomen, fever, and generalized toxicity. On the 4th post-operative day the patient became jaundiced which was thought most likely due to a hemolytic blood transfusion reaction. On the 5th post-operative day, there was slight suppuration of the inferior end of the exploratory wound. Sutures were removed and drainage established. On the 6th post-operative day, there was evidence of toxic psychosis manifest by delirium and confusion and expressions of persecution. The patient was reassured, and all supportive measures continued.

By the 10th post-operative day, there was much clinical improvement. This progressed until the patient was evacuated from this unit on his 22nd hospital day. At the time of his evacuation, he was afebrile; he was fully orientated; his jaundice had essentially disappeared. He was eating a full diet, and his colostomy was functioning normally. The wound infection was under control, with secondary healing evident.

COMMENT: A case of gunshot wound of the abdomen is presented. It tends to point out the well recognized fact that a direct relationship exists between the post-operative complications that may be anticipated and the time interval from injury to operation. It further shows the value of holding a patient at one installation where post-operative complications which arise may be handled by the operating surgeon. Finally, it stresses the value to the patient of remaining at one installation until definite clinical equilibrium is established before being placed again in the chain of evacuation.

STATISTICAL



Admission rates per 1000 troops per annum, Army personnel, for the 4-week period ending 26 Jan 51 were as follows:

	<u>FEC</u>	<u>JAPAN</u>	<u>KOREA</u>	<u>MARBO</u>	<u>PHILCOM(AF)</u>	<u>RYCOM</u>
All Causes	1193	700	1451	252	326	397
Diseases	886	654	1023	195	307	363
Injuries	255	46	352	58	19	34
Battle Casualties	52	0	76	0	0	0
Psychiatric	25	25	27	0	0	3.7
Common Respiratory Diseases and Flu	203	167	234	37	29	6.2
Primary Atypical Pneumonia	9.5	2.2	13	0	0	6.2
Common Diarrhea	17	2.9	24	0	0	0
Bacillary Dysentery	.39	0	.49	0	9.6	0
Amebic Dysentery	.34	.22	.33	0	0	1.2
Malaria, new	2.5	.44	3.4	0	9.6	0
Infectious Hepatitis	16	7.7	21	0	9.6	7.5
Mycotic Dermatoses	1.3	.66	1.6	0	9.6	0
Rheumatic Fever	.67	.66	.74	0	0	0
Venereal Diseases	113	179	84	0	38	205

ALL CAUSES ADMISSION RATE:

In January, the rate of admission to hospital quarters and dispensary for Army personnel of the FEC was 1193/1000/per year. This represents an increase when compared to the previous month's rate of 1081, and is the highest all causes rate since September, 1950, at which time it was 1619. Of the major commands, Korea's rate increased from 1255 in December to 1451 in January. RYCOM reported no significant change for the same period, while the other major commands all experienced decreased in their rates.

The disease component of the all causes rate increased from 646 in December to 886 in January. This component accounts for the increase in the all causes rate. Korea reported a marked increase in its disease incidence rate, from 684 in December to 1023 for January, with common respiratory diseases and influenza, infectious hepatitis, fever of undetermined origin and venereal diseases being the principal contributors among its reportable diseases. No particularly significant changes were reported in disease incidence by the other major commands, and their rates continue favorable in comparison with previous experience.

A minor increase occurred in the FEC nonbattle injury component of the all causes rate. The rate for Army personnel only in December was 243 as compared to 255 in January. Cold injuries constituted 38% of the FEC total nonbattle injury rate. The rate in Korea was 352 for January as against 311 for December, with cold injuries accounting for the increase. RYCOM experienced a minor increase, while Japan, MARBO and PHILCOM (AF) reported substantial decreases.

A marked decrease in the battle casualty rate was reported for January. The FEC rate on Army only for December was 192 as compared to 52 for January. For Korea alone, the rate decreased from 259 for the previous month to 76 for January, and is the lowest rate so far experienced.

The FEC average daily non-effective rate per 1000 Army troops for January was 48 as compared to 46 for December. Likewise, all major commands reported a rather static rate. If the rates of the FEC, Japan and PHILCOM (AF) are compared with previous rates which included Air Force strength, a considerable increase will be noted. This is explained by the increase in patient days lost as a result of casualties from Korea being hospitalized in Japan, and Philippine Scouts in PHILCOM (AF), plus the omission of Air Force personnel strength in computing January rates.

DISEASES:

Common Respiratory Diseases and Influenza: The incidence of common respiratory diseases infections in the FEC increased from a rate of 115 per 1000 per year in December to 203 in January. This increase is attributed to experiences in Korea, and Japan, to a lesser extent. Korea's rate for December was 107 as against 234 for January, while Japan's rates for the same periods were 162 and 167 respectively. As a matter of comparison, incidence rates for these diseases among US military personnel in Korea during January, February, March and April of 1947 were 497, 613, 316 and 295 respectively. It is further noted that the FEC rate of these diseases during the first three months of 1947 were considerably higher than the above rate for this year.

In view of the demonstrated presence of influenza in the FEC and the outbreaks of the disease reported elsewhere in the world, a program of influenza vaccination for Japan, RYCOM and Korea was

initiated on 19 January.

Psychiatric: The incidence of psychiatric conditions has remained static in the FEC for the past 3 months, the rates being 23 in November, 22 in December and 25 in January. The rates in both Japan and Korea have closely paralleled the rates of the FEC for the same periods. RYCOM, whose rate has decreased from 12 in November to 3.7 in January, is the only command reporting a notable change during this time.

Malaria: As was to be expected, following the discontinuance of suppressive therapy in late October and early November, a minor increase in malaria was reported during January. The FEC rate for January was 2.5 as against 1.9 for the preceding month. This minor increase is the result of Korea's experience. There the rate increased from 2.3 in December to 3.4 for January.

Diarrhea and Dysentery: The number of intestinal diseases infections reported has remained about the same for the past 3 months. Practically all cases occurring during this time have been among troops in Korea. The rate for that command for January was 28, as compared to the FEC rate of 20.

Infectious Hepatitis: Following a slow but definite increase during the past several months, the FEC's rate for infectious hepatitis was 16 in January as compared to 9.8 in December and 13 in November. 85.6% of the reported cases for the month were from Korea. The rates in Korea for November, December and January were 17, 10 and 21 respectively, while in Japan the rates for the same periods were 4.7, 9.9 and 7.7. RYCOM has experienced a somewhat lesser incidence rate than has Japan while PHILCOM (AF) and MARBO have reported practically none.

Venereal Diseases: The venereal disease rate among Army personnel in the command increased from 70 for December to 113 for January. Korea, Japan and RYCOM reported increases for the month. Korea had an increase from 46 in December to 84 for January; Japan, from 123 to 179, and RYCOM, from 178 to 205. PHILCOM (AF)'s rate was 38 for the month, while MARBO reported no cases.

Miscellaneous Diseases: For the second consecutive month, the rate of pneumonia increased sharply. The FEC rate for January was 24 as compared to 15 for December and 6.6 for November. This increase resulted entirely from experience among personnel in Korea where the rates for the same months were 32, 18 and 8.3 respectively. Information was received from Korea of the occurrence of 3 cases of smallpox among UN personnel during January. One case occurred among US Army personnel, one among US Marines and one among New Zealand Forces.

Cold Injuries: The cold injury incidence rates among Army personnel in Korea for November, December and January were 25, 94 and 143 respectively. The rates for the FEC during the same periods were 17, 50 and 97 per 1000 strength per year.

Deaths: 78 deaths were reported by medical treatment facilities in the command during January. This is a considerable decrease in comparison to previous months. Of the 78 deaths, 23 were among battle casualties, 39 among nonbattle injury casualties and 16 among disease cases.

EVACUATION: Tabulated below are the number of patients evacuated from the major commands to the ZI during the 4-report weeks in January and the number of patients awaiting evacuation as of 26 January 1951:

	JAPAN	MARBO	PHILCOM (AF)	RYCOM	FEC
By Air	1,985	1	8	67	2,061
By Water	18	1	1	7	27
Total	2,003*	2	9	74	2,088
Pnts Awaiting Evacuation	150	0	0	12	162

(*1,429 patients originated from Korea.)

HOSPITALIZATION: The bed status as of 26 January 1951 was as follows:

	Bed Capacity		Operating	% Normal Bed		% of Operating
	Normal	Mobilization	Beds	Beds Occupd.	Capacity Occupd.	Beds Occupd.
JAPAN	8,550	9,310	8,550	7,997	94	94
KOREA	2,960		2,960	1,939	66	66
MARBO	200	200	200	55	28	28
PHILCOM(AF)	1,250	1,604	135	127	10	94
RYCOM	250	300	250	105	42	42
FEC	13,210	11,414	12,095	10,223	77	85

In Korea 11,135 operating beds are established for POW of which 8,857 are occupied.

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Medical troops deliver evacuee to helicopter at Chonan, Korea



Collecting station personnel remove casualty from helicopter at Chungju



Helicopter leaves Chonan field carrying wounded to hospital



Wounded men from X Corps Special Activity "Raider" group are evacuated from Yeachon



Medical technician assists ambulatory patient aboard helicopter. He had been treated at a forward clearing station



Army pilot brings helicopter in after evacuation mission. Note new type of ski landing gear for use on snow and ice.



Casualty secured in helicopter litter "pod". He later received an in-flight transfusion.

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The Chief Surgeon extends an invitation to all personnel of the Army Medical Services to prepare and forward, with view to publication, articles of professional or administrative nature. It is assumed that editorial privilege is granted. Copy should reach the Medical Section, General Headquarters, Far East Command, not later than the 10th of the month preceding the issue in which publication is desired.

Lt. John J. Griffin, Editor

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